6HF8

High-Mu Triode—Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:		
Voltage (AC or DC)	6.3 ± 10%	volts
Current at 6.3 volts	0.75	amp
Direct Interelectrode Capacitances:▲		
Triode Unit:		
Grid to plate	3.5	μμf
Grid to cathode, pentode cathode & grid No.3 & internal shield, and heater	2.8	μμf
Plate to cathode, pentode cathode & grid No.3 & internal shield, and heater	2.6	μμf
Pentode Unit:		
Grid No.1 to plate	0.1 max.	μμf
Grid No.1 to cathode & internal shield & grid No.3, grid No.2, and heater	10	μμf
Plate to cathode & internal shield & grid No.3, grid No.2, and heater	4.2	μμf
Triode grid to pentode plate	0.015 max.	μμf

Characteristics, Class A_1 Amplifier:

	Triode Unit	*Pentode Unit*		
Plate Supply Voltage	200	45	200	volts
Grid-No.2 Supply Voltage	–	125	125	volts
Grid-No.1 Voltage	-2	0	–	volts
Cathode Resistor	–	–	68	ohms
Amplification Factor	70	–	–	
Plate Resistance (Approx.)	17500	–	75000	ohms
Transconductance	4000	–	12500	μmhos
Plate Current	4	40●	25	ma
Grid-No.2 Current	–	15●	7	ma
Grid-No.1 Voltage (Approx.) for plate μa = 100	–	–	-9	volts
Grid-No.1 Voltage (Approx.) for plate μa = 20	-6	–	–	volts

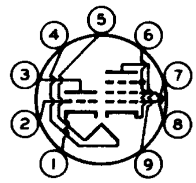
Mechanical:

Operating Position	Any
Maximum Overall Length	2-5/8"
Maximum Seated Length	2-3/8"

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Length, Base Seat to Bulb Top (Excluding tip) . . . 2" ± 3/32"
Diameter . . . . 0.750" to 0.875"
Dimensional Outline. . . . . .See *General Section*
Bulb T6-1/2
Base . . . . Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW 9DX

Pin 1 - Triode Cathode
Pin 2 - Triode Grid
Pin 3 - Triode Plate
Pin 4 - Heater
Pin 5 - Heater



Pin 6 - Pentode Cathode, Grid No.3, Internal Shield
Pin 7 - Pentode Grid No.1
Pin 8 - Pentode Grid No.2
Pin 9 - Pentode Plate

AMPLIFIER — Class A$_1$

Maximum Ratings, *Design-Maximum Values:*

	Triode Unit	*Pentode Unit*	
PLATE VOLTAGE.	330 max.	330 max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE	–	330 max.	volts
GRID-No.2 VOLTAGE.	–	See *Grid-No.2 Input Rating Chart* at front of Receiving Tube Section	
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Positive-bias value. . . .	0 max.	0 max.	volts
GRID-No.2 INPUT:			
For grid-No.2 voltages up to 165 volts.	–	1.1 max.	watts
For grid-No.2 voltages between 165 and 330 volts.	–	See *Grid-No.2 Input Rating Chart* at front of Receiving Tube Section	
PLATE DISSIPATION.	1 max.	5 max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode . . .	200 max.	200 max.	volts
Heater positive with respect to cathode . . .	200★ max.	200★ max.	volts

Maximum Circuit Values:

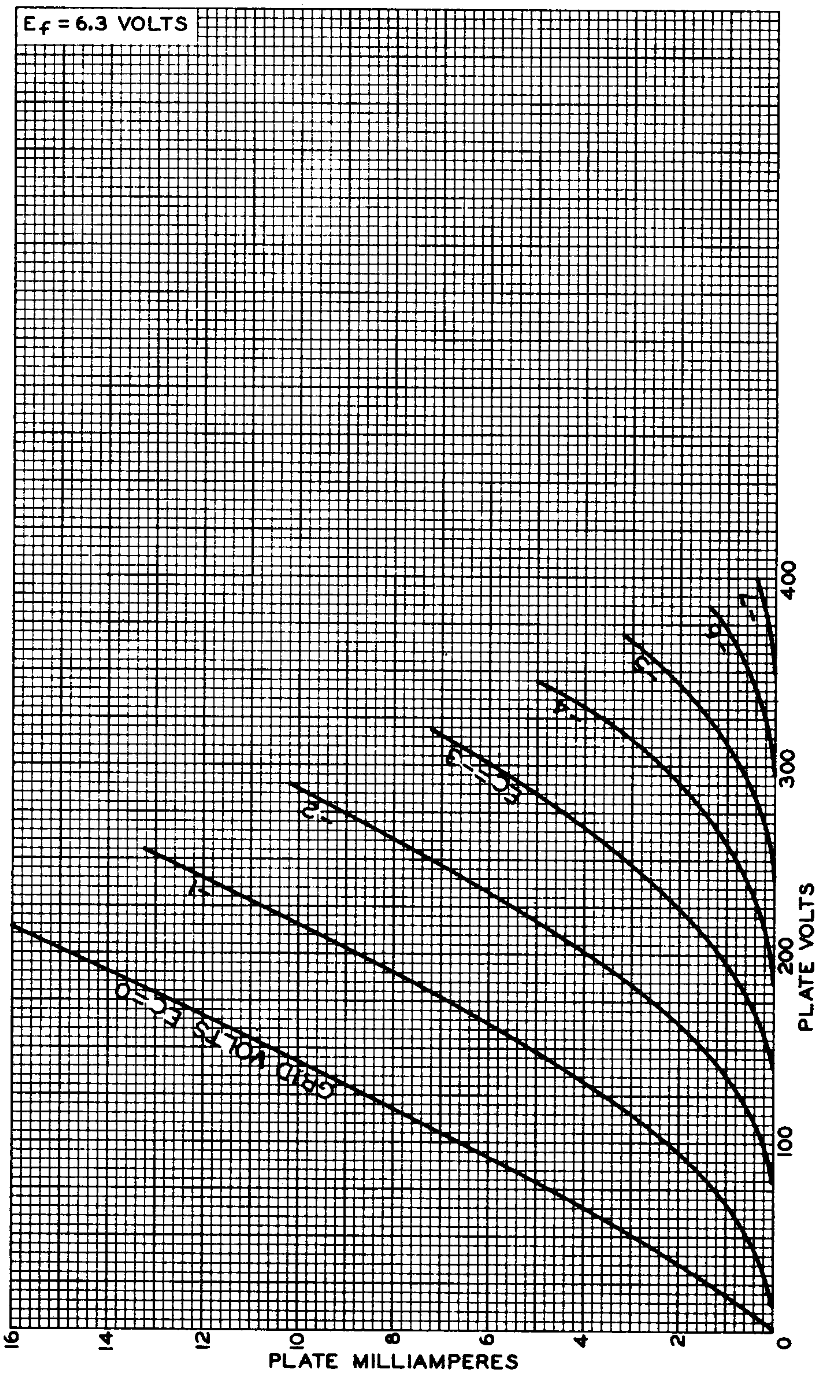
	Triode Unit	*Pentode Unit*	
Grid-No.1-Circuit Resistance:			
For fixed-bias operation .	0.5 max.	0.25 max.	megohm
For cathode-bias operation.	1 max.	1 max.	megohm

▲ Without external shield.

● This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.

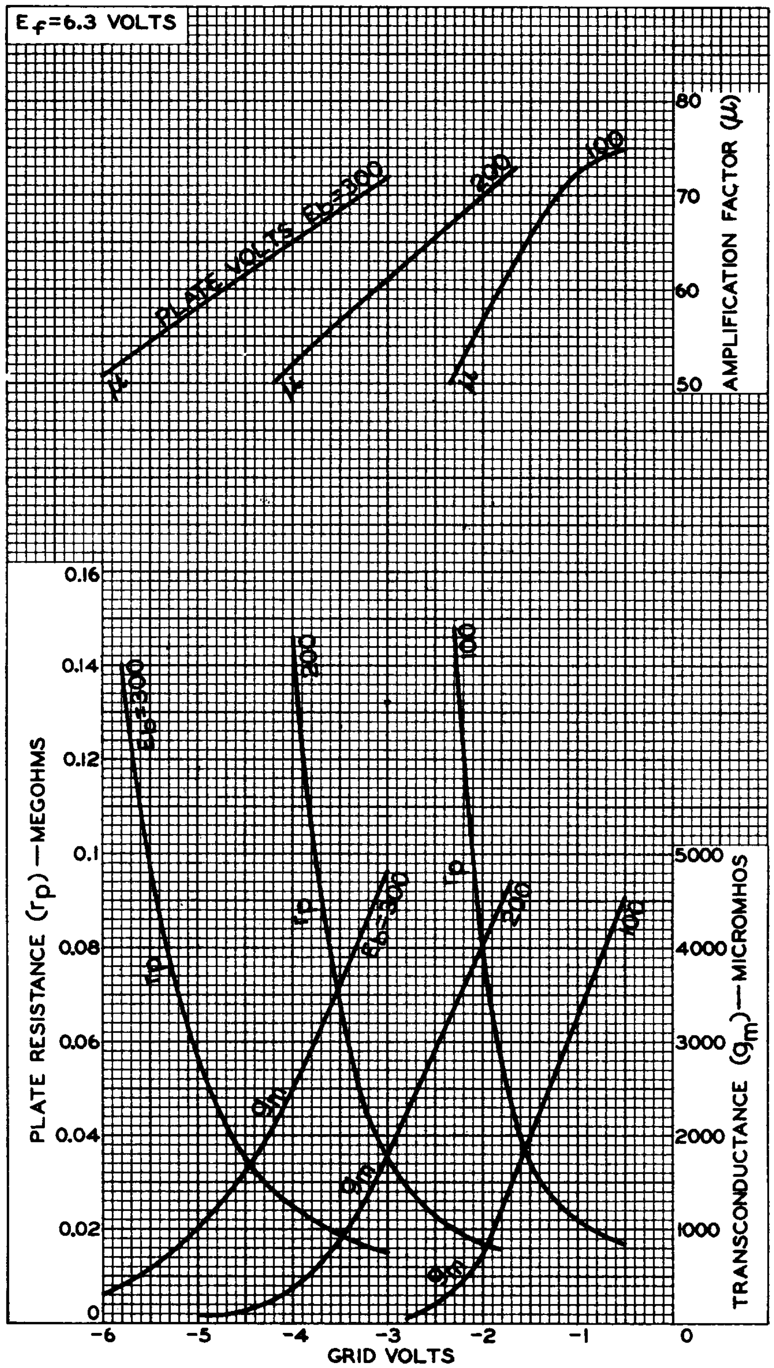
★ The dc component must not exceed 100 volts.

AVERAGE PLATE CHARACTERISTICS
Triode Unit



92CM-8644

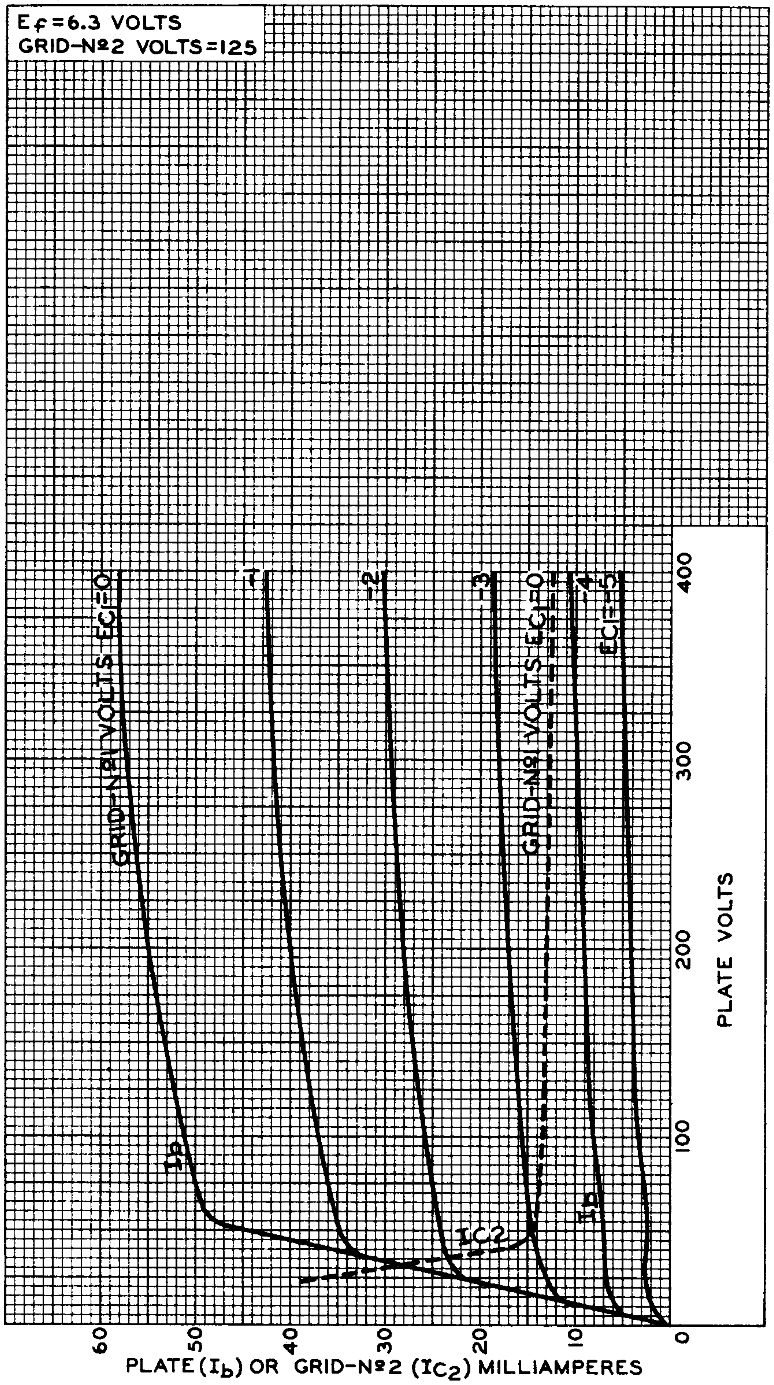
AVERAGE CHARACTERISTICS
Triode Unit



92CM-10874

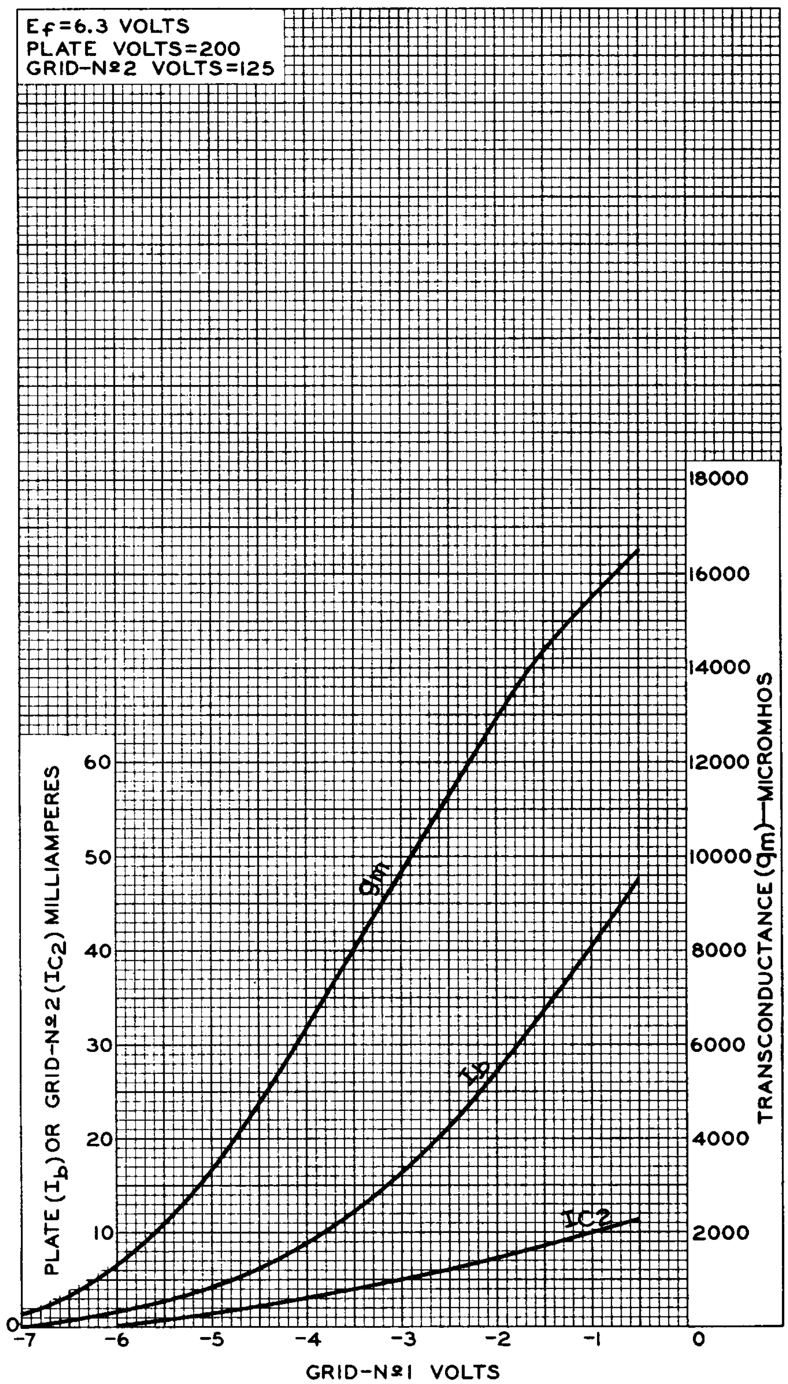
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AVERAGE CHARACTERISTICS
Pentode Unit



92CM-9906

AVERAGE CHARACTERISTICS
Pentode Unit



92CM-9905RI